

Division Opinion

Inquiry :# 2012-02

Subject: Standby power for elevators in high rise buildings.

Code: 2006 IBC, section 403.10

Submitted By: Larry Farris, BKV Group

Approved By: Stephen P. Hernick

Issue Date: December 10, 2012

Question (re-phrased)

In the 2007 Minnesota Building Code, section 403.10 of the 2006 IBC, appears to set the standby power requirement for elevators as only the elevators designated as part of an accessible means of egress, by referring to 1007.4. Please confirm

Answer:

We do not believe that the inclusion of 1007.4 was meant to set the scope of where standby power is required for elevators in a high rise building. Standby power is required for all elevators in a high rise building.

Discussion:

We appreciate the code tracking provided with this question (see Attached) and can see that given the wording of the 2006 IBC section 403.10.2 that the requirement for standby power appears to be scoped by IBC 1007.4. This would be a less than intentional way for scoping to be determined. Section 403.10.2. was changed from the 2003IBC to the 2006 IBC with the addition of a reference to 1007.4. It was clear in the 2003 IBC that all elevators were part of the required loads for standby power and we believe that the addition of 1007.4 in the 2006 was a reference to that section, not meant to limit the scoping. This was cleaned up in the 2012 IBC to eliminate any confusion.

Background Information:

2003 IBC section 403.10.2 Standby power loads. Includes: "Standby power shall be provided for elevators in accordance with Section 3003."

2006 IBC section 403.10.2 Standby power loads. Includes: "Standby power shall be provided for elevators in accordance with Sections 1007.4 and 3003."

2012 IBC section 403.4.8 Standby power. States: "A standby power system complying with Chapter 27 and Section 3003 shall be provided for standby power loads specified in 403.4.8.2" **Section 403.4.8.2 Standby power loads.** Includes: "3. Elevators."



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December 6, 2012

Steve Hernick, State Building Official
Minnesota Department of Labor and Industry
443 Lafayette Road N.
St. Paul, MN 55155

Re: Code Interpretation regarding Standby power requirements for Elevators.
MSBC Sections 403.9, 403.10, 1007.4, 2702, and 3003, along with subsections
of each.

Dear Mr. Hernick:

BKV Group is formally requesting the Minnesota State Building Official to provide a Code Interpretation on the requirements for Standby power for Elevators, as required in the 2007 Minnesota State Building Code.

A municipality in the State of Minnesota is currently requiring all elevators installed in a high-rise building to be provided and connected to Stand-by power, regardless of the elevators intended use.

It has long been our position that the requirement for Stand-by power should only be applied to elevators serving as an Accessible means of egress. Our code tracking is as follows:

Section 403.9 Elevators. Elevator operation and installation shall be in accordance with Chapter 30.

Section 403.10 Standby power. A standby power system complying with Section 2702 shall be provided for standby power loads specified in Section 403.10.2.

403.10.2 Standby power loads. The following are classified as standby power loads:

1. Power and lighting for the fire command center required by Section 403.8;
2. Electrically powered fire pumps;
3. Ventilation and automatic fire detection equipment for smoke proof enclosures; and
- 4. Standby power shall be provided for elevators in accordance with Sections 1007.4 and 3003.**

Section 1007.4 Elevators. In order to be considered part of an accessible means of egress, an elevator shall comply with the emergency operation and signaling device requirements of Section 2.27 of ASME A17.1. Standby power shall be provided in accordance with Sections 2702 and 3003. The elevator shall be accessed from either an area of refuge complying with Section 1007.6 or a horizontal exit.

Section 1007.4 is the first section that actually requires standby power but only when the elevator serves as an accessible means of egress.

Section 2702 Emergency and Standby Power Systems

Section 2702.2 Where required. Emergency and standby power systems shall be provided where required by Sections 2702.2.1 through 2702.2.20.

Section 2702.2.5 Accessible means of egress elevators. Standby power shall be provided for elevators that are part of an accessible means of egress in accordance with Section 1007.4.

Section 2702.2.19 Elevators. Standby power for elevators shall be provided as set forth in Section 3003.1.

Here again we see that Chapter 27 refers the reader back to Section 1007.4 for the actual requirements. Chapter 27 in it self does not contain the requirements for standby power for elevators.

Section 3003.1 Standby power. In buildings and structures where standby power is required or furnished to operate an elevator, the operation shall be in accordance with Sections 3003.1.1 through 3003.1.4.

Section 3003.1 clearly states that if standby power is provided, it needs to comply with this section; it does not require the standby power.

Based on the above code tracking it is our opinion that Standby power is only required for elevators when the elevator is used as an accessible means of egress. If the designer chooses to install more than the required number of elevators needed, and those elevators are not serving as the accessible means of egress, we believe that the extra elevators do not require Standby power.

Thank you for your time and assistance with this matter.

Sincerely,

Larry Farris, BKV Group